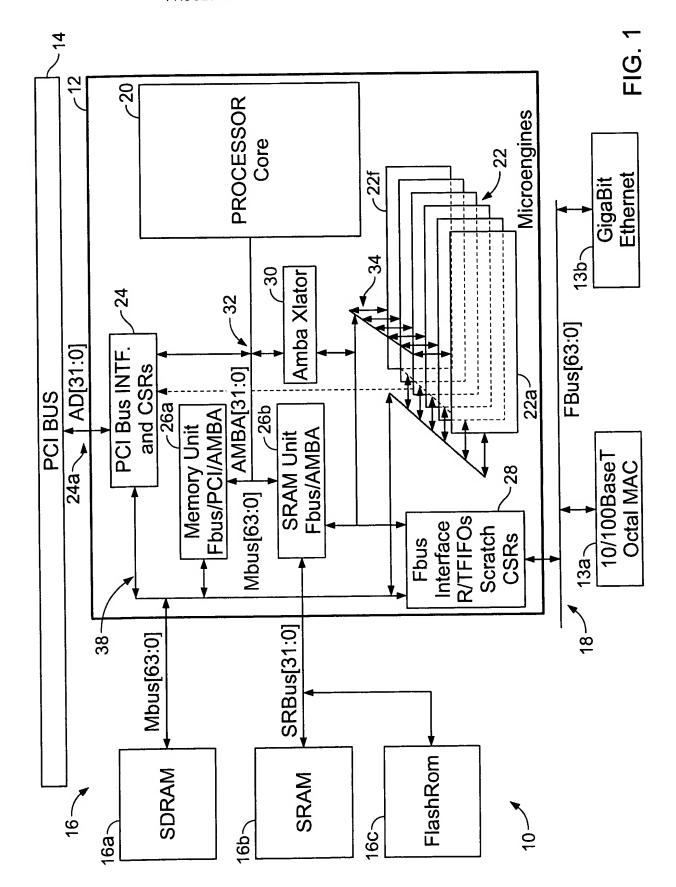
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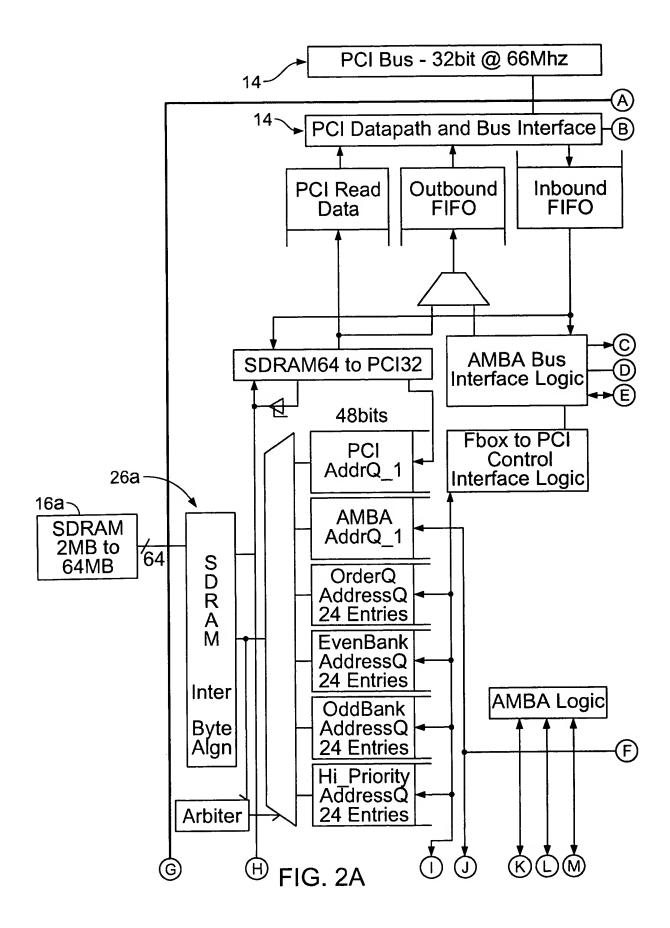
Applicant(s): Gilbert Wolrich et al.

THREAD SIGNALING IN MULTI-THREADED NETWORK



Applicant(s): Gilbert Wolrich et al.

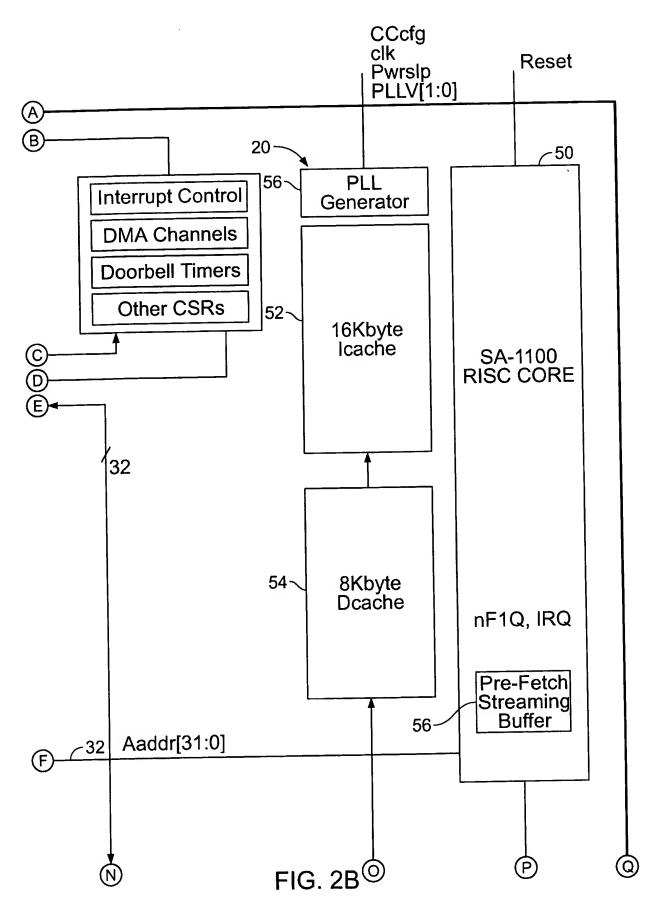
THREAD SIGNALING IN MULTI-THREADED NETWORK



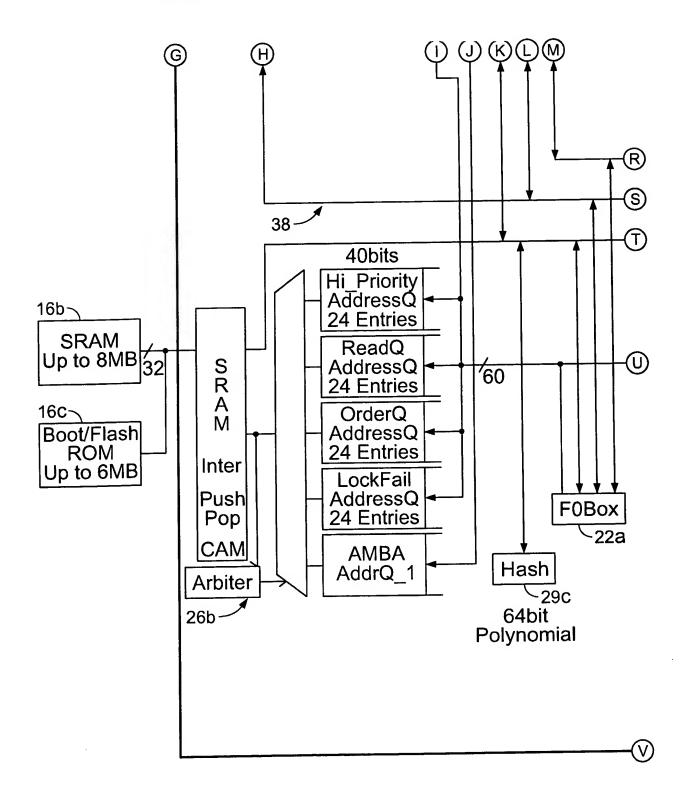
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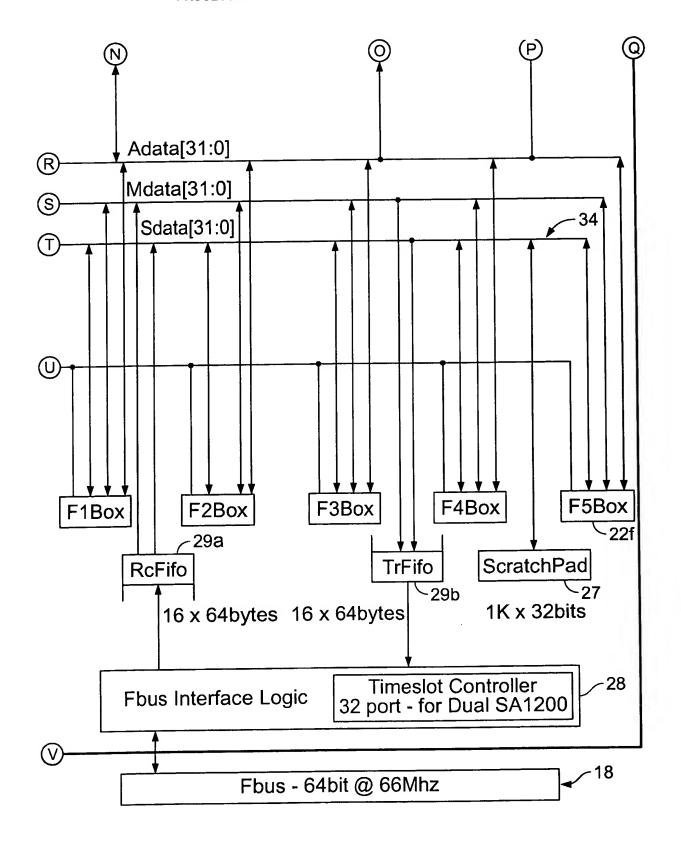
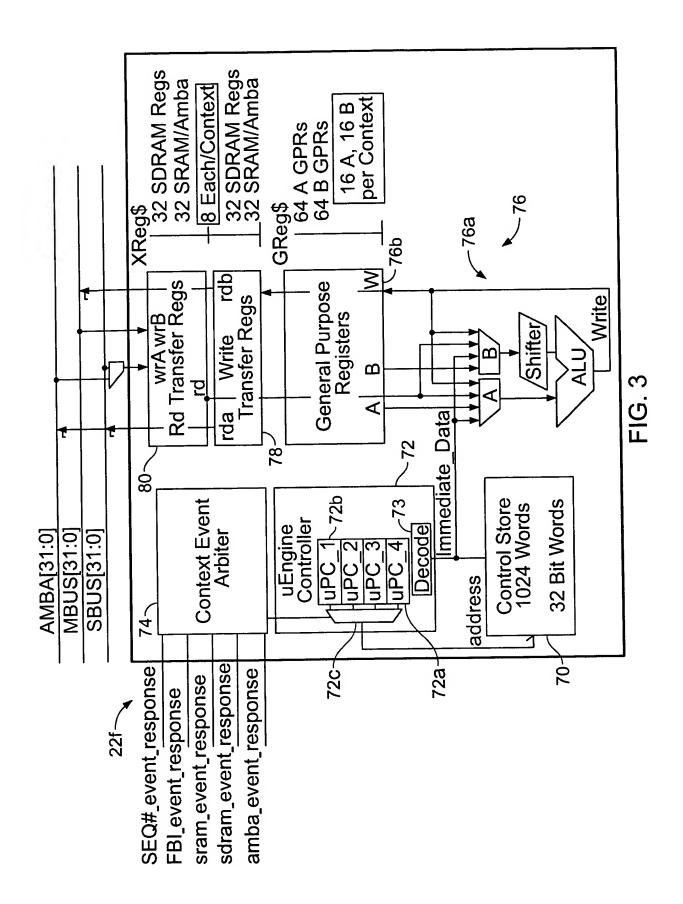


FIG. 2D

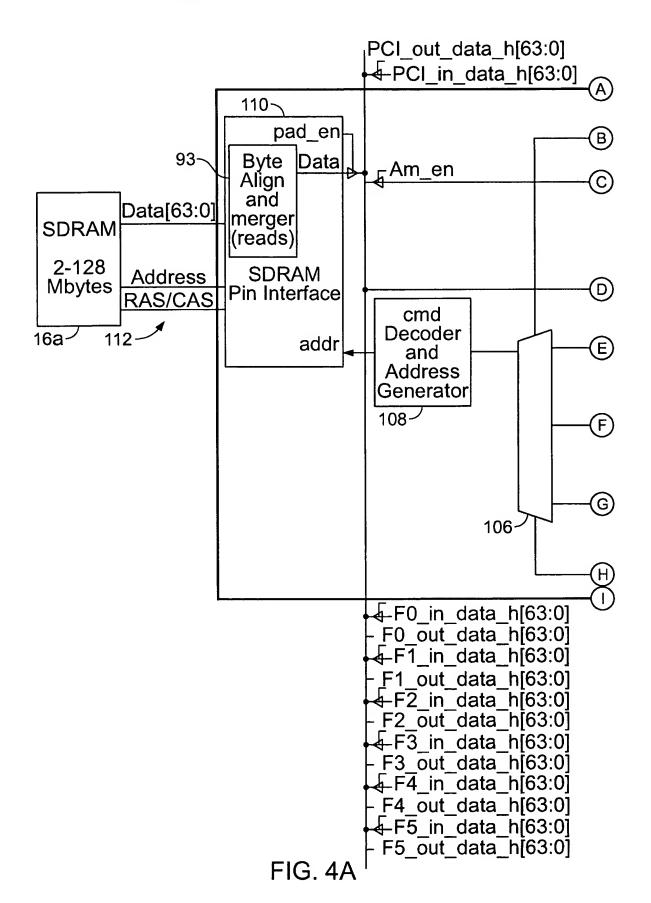
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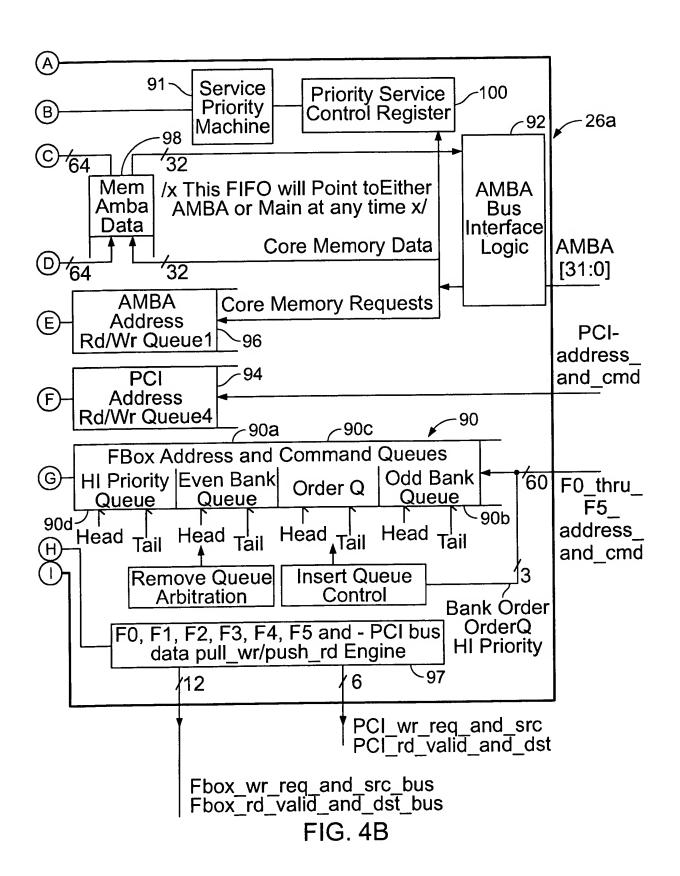
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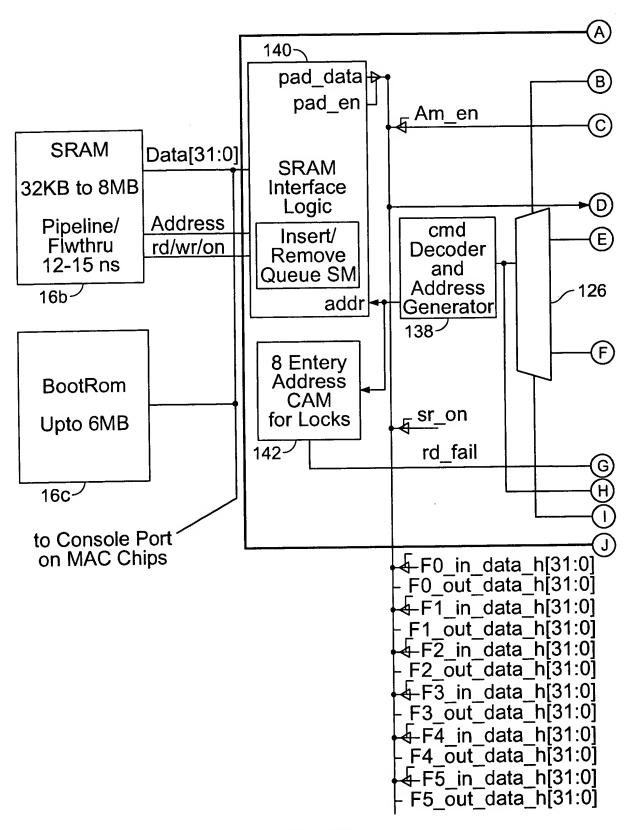
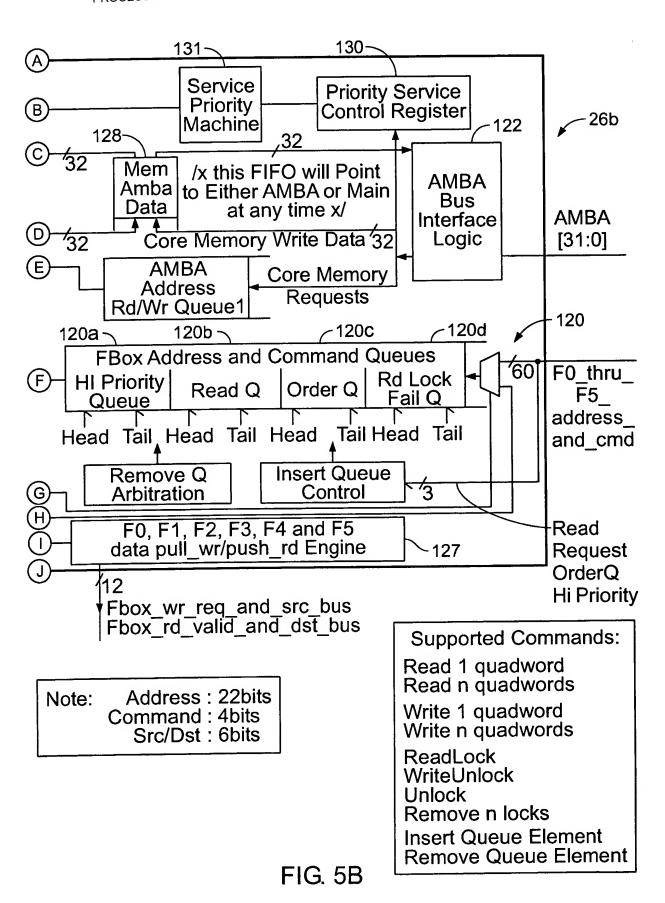


FIG. 5A

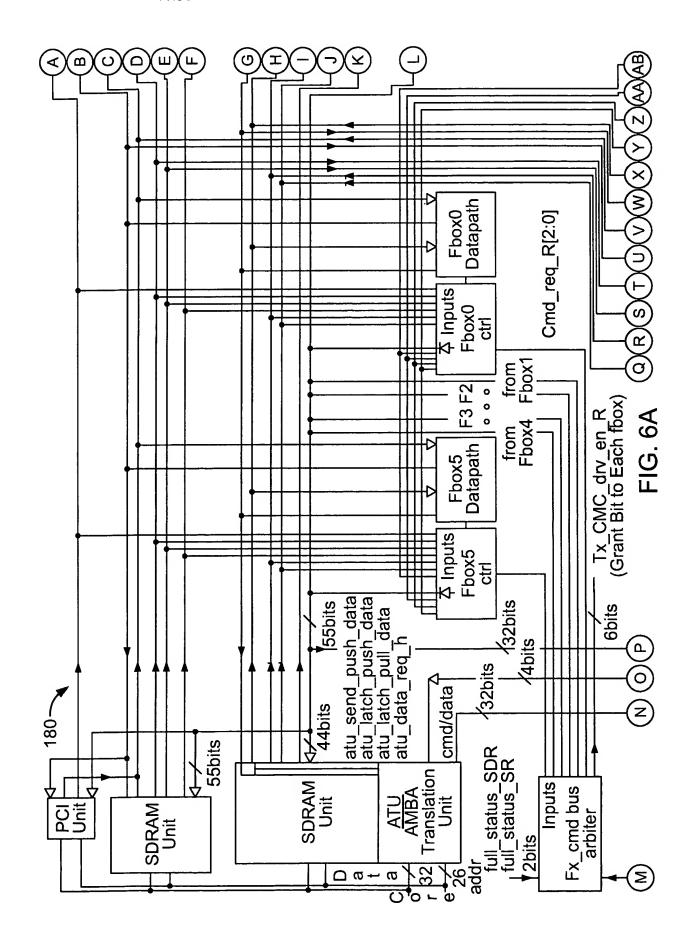
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PROCESSOR

Sdram_push_addr_R<6:0> & Sdram_push_id_R<2:0> PCI_sdone_Tbox_R<2:0> & PCI_sdone_ctx_R<1:0> Sbus_push_addr_R<4:0> & Sbus_push_ld_R<3:0> Sdram_pull_addr_R<6:0> & Sdram_pull_id_R<2:0> Sbus_pull_addr_R<4:0> & Sbus_pull_ld_R<3:0> (L)—T_cmd_type_R<2:0> (Unit Address) - Sdram_sdone_Tbox_R<2:0> Sdram_push_data_R<31:0> Sram_sdone_Tbox_R<2:0> T_cmd_bus_R<54:0> Sets Sdram_pull_data_R<31:0> Sdram_sdone_ctx_R<1:0> Sbus_push_data_R<31:0> - Sram_sdone_ctx_R<1:0> Sbus_pull_data_R<31:0> ග

FBI_Sdone_Tbox_R<2:0> & FBI_Sdone_ctx_R<1:0>
FBI_auto_push_Tbox_R<2:0> & FBI_auto_push_ctx_R<1:0>
Ithrd_sdone_Tbox_R<2:0> & Ithrd_sdone_ctx_R<1:0>
Seq1_num_Isb_R & Seq2_num_Isb_R
Seq1_num_Isb_R & Seq2_num_Isb_R
NOTE: 277 hori tracks x 5/4 x 8 = 2770cdu's

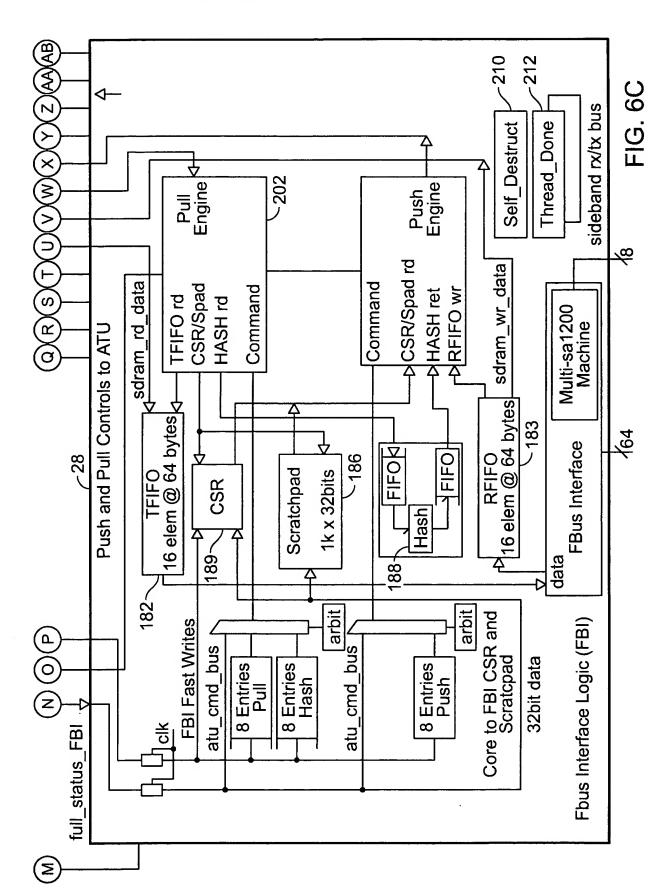
FIG. 6B

Note: Fboxes Time Multiplex the cmd bus.

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PROCESSOR

T Cmd_type R<2:0>_ 000 : Bus Idle 001 : SDRAM 010 : SRAM 011 : SRAM-csr	
--	--

Pull Engine Cmd Arbitration: 1) Amba 2) Hash 3) Pull Cmds	\square	2) Hash Completion 3) Push Cmds

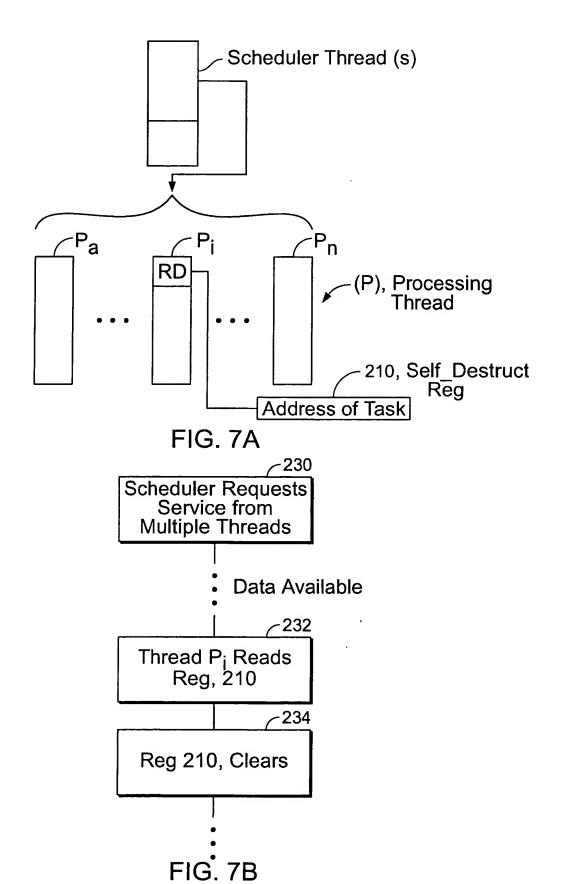
br/ctx br/ctx br/ctx br/ctx br/ctx ਲੁ br/ctx br/ctx br/ctx ಹಹಹ (flag) (flag) Fbox Branch/Ctx Choices flag) ccodes, contexts and kil Seq #7_change Seq #2_change SRAM_sdone SDRAM_sdone volunteer_ctx_swap Nec_req_available SDRAM_rd parity err push protect l_sdone l_auto_push sdone rec ctl thread signal 4100100

Cmd_Req_R<2:0; 001 Sram Chair 010 SDR Chain Tx_CMD_drv_en 100 SDR 101 FBI 000 none 011 Sram 110 PCI 0 none grant R<1:0> use sram_push_data_bus (makes sram appear like use sram_push_data_bus b) Core to FBI Regs: use Sram pull data bus d) Core Reads FBIRegs. c) Core reads FboxRegs another Fbox to FBI or a) Core to FboxRegs: use Private ATU/FB ATU Notes: cmd/data bus

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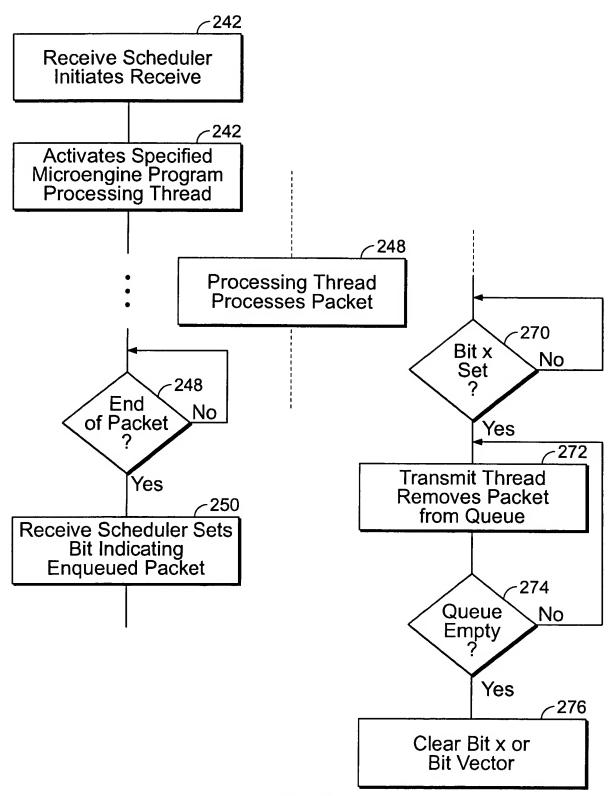


FIG. 8

THREAD SIGNALING IN MULTI-THREADED NETWORK

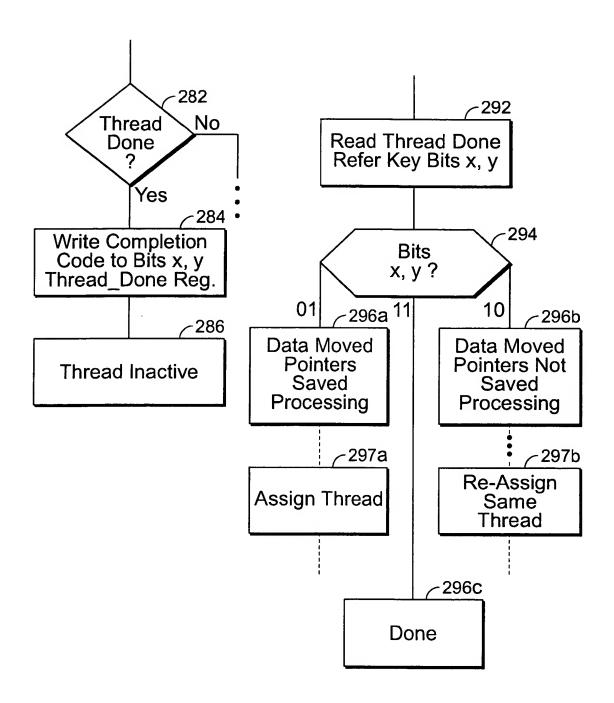


FIG. 9